is to be congratulated on the accuracy of her drawings and the rapidity with which she does them. We hope that this maiden task in hyper-critical study will not discourage her from undertaking further work in Bryology. She has been devoting her major energies to Bacteriology for the Red Cross, and it is understood is contemplating devoting herself to this work as a profession.

NEW YORK BOTANICAL GARDEN. ELIZABETH G. BRITTON.

A. Hesselbo—The Bryophyta of Iceland[1]

This is decidedly one of the most important bryological works of recent years, as Iceland was, in respect to its bryophyte flora, the most neglected of fairly accessible northern lands. Lists prior to those of Grönlund the present author finds to be essentially worthless, while those of Grönlund himself were, besides being incomplete, rather faulty. The present author's collections and observations were made upon three summer trips, in 1909, 1912 and 1914, and the greatest weakness of the work lies in the fact that the whole island could not possibly be covered by such limited field work, as the author realizes. Still one is impressed by the remarkably good use made of the time at his disposal. There are listed 93 hepatics, 20 *Sphagna*, and 324 (or including 2 subspecies, 326) true mosses. The attention paid to species found only in sterile condition shows the carefulness with which the author worked. Old records which were based upon wrong identifications or are otherwise suspicious are not included, though notes upon them are inserted. The flora of Iceland is, as has long been known, essentially northern European, among the mosses *Bryoxiphium norvegicum* being a unique case of a species found in Iceland and North America, but lacking in Europe. Two new species in *Bryum* and one in *Brachythecium* are proposed. Under the separate species are remarkably detailed notes as to habitat, while the whole is summed up in an œcological supplement. Most interesting in this is the careful study of the flora of the various hot springs. Species of *Riccia*, *Anthoceros*, *Archidium*, *Entosthodon*, etc., were found confined to warm ground of this description, while other bryophytes found their best development and most frequent occurrence under such conditions. One thing missed in this part of the work is an adequate discussion of geological substrata, particularly as to their chemical constituents. It is for example certainly to be expected that the flora of the areas of acidic lava would differ from that of basic lavas, and there is even a limited area of sedimentary rock (apparently visited by the author near Húsavik). A good geological map, by Thoroddsen, makes it possible to lay out one's route somewhat with reference to these differences and to at least gain some fundamental ideas of the effect of the different rocks upon the moss-flora, which a work on the comprehensive plan of this one demands. Of the additions which I have published,[2] all with two exceptions, *Pleuridium alternifolium* and *Dicranella Grevilleana*, are included on the basis

[1] Rosenvinge & Warming. The Botany of Iceland, Vol. I, Part 4. Pp. 395-677. 1918.

[2] Bryologist **18**: 51f. 1915; Torreya **16**: 47ff. 1916; **17**; 60ff. 1917.

of independent collection. Many of the statements of distribution, principally the negative ones, are too sweeping, as based upon a too limited field experience, and are contradicted by my own observations. To note only a few cases that have struck my attention:

Desmatodon latifolius is said (page 455) to appear to be quite absent from southwest and south Iceland. Yet I found it nicely fruiting on the lava-field at Hafnarfjördhur.

Tortula mucronifolia (page 456) is recorded only from Vestmannaey[3], but I have two specimens collected at Hafnarfjördhur and Isafjördhur. There is no reason why this species should not be expected at least as far north as *T. subulata*, though I also found it less common.

Dissodon splachnoides (page 467) is said to be absent or very rare in the southwestern and southern part. But I found it growing nicely in a boggy place at the base of Ingólfsfjall, near the bridge over the Olfusá in the southern lowland.

Meesea triquetra (page 492) is recorded as found only sterile. I found the plant with capsules, not far from Reykjavik.

Glacier-rivers (page 548) are said to be entirely devoid of bryophyte vegetation, which may be largely true. Yet I noticed in the Olfusá a short distance below the bridge, that a fish-net had brought up a good deal of *Fontinalis*, the presence of which one would not otherwise have suspected.

Pohlia polymorpha (pages 640, 643) is, on the basis of a single collection, recorded only from the "Mountain Region" (alt. 300–600 m.); but my own two localities, Hafnarfjördhur and Lâgafell, are lowland. Probably all or nearly all of the Iceland mosses of higher altitudes may be found descending to near the sea-level, though the lowland ones may not be expected to ascend in anything like the same proportion.

The illustrations are good and suggest the possibility of a considerably extended use of the camera in moss-study.

A. LeRoy Andrews

Ithaca, N. Y.

ANNUAL REPORTS—SULLIVANT MOSS SOCIETY—1918

Report of the President

The Armistice has lifted a load of care and trouble from a long-suffering world, and we are beginning to get reprints and publications from Central Europe which tell us what our old "*friendly enemies*" have been doing. They, too, have had difficulty in learning about our activities, for the *Botanisches Centralblatt* is giving abstracts of publications dating back to 1914–1916. The gift of

[3] There is no singular Vestmannaey, but only the plural Vestmannaeyjar (a small group of islands just south of the Iceland coast). Hesselbo's collections were evidently made upon the larger inhabited island, whose name is Helmaey. Generally speaking the Icelandic names in this work are identifiable, but in a Danish work of the sort one expects them to be correct.